4. ARCHAEOLOGICAL INVESTIGATIONS

Two campaigns of surface and subsurface investigations identified the edge of the Williams yard, but provided scant data on the lives of site occupants.

The Nathan Williams Site was first identified during the general survey of the Scarborough Road project area (Heite and Blume 1992: 67) and described as a "rare example of documented free black antebellum site" for which a Phase II investigation was recommended. Subsequent research indicates that Williams may have been a member of the local Native American community, but the site remains a rare example.

Phase II work performed in 1992 was published in connection with a study of properties at the McKee Road terminus of Scarborough Road (Heite and Blume 1995: 42-45, 65-73, 92). During the Phase II investigations, a strip of ground along the edge of the roadway was scraped by a Gradall, and features were identified (Figure 7). A soil chemical survey was carried out, and a flagged surface collection was conducted.

This technique proved successful for locating artifact concentrations, even though it did not produce a facile table of numerical results. The surface collectors were given pin flags and instructed to stick one in the ground whenever there were several artifacts in a small area. The resulting diagram, figure 8, convincingly identified a concentration of artifacts.

Scattered features were revealed by the Gradall, but no foundations or other structural remains could be identified. The features are shown on figures 13-17. After subsurface features were identified, they were found to cluster near the concentrated artifacts that had been identified in the surface collection.

Perhaps more significantly, the Phase II flagged surface survey revealed what appeared to be a line of nineteenth-century artifacts parallel to the road and about twenty or thirty feet east of the present pavement. This apparent line of artifact clusters was interpreted as a fence line, consistent with a swept yard.

In a traditional swept yard, all trash is scrupulously swept from the bare earth of the immediate house

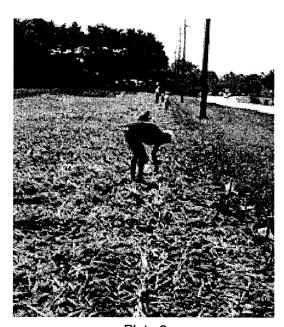


Plate 2
Surface collections by volunteers

The site was staked in ten-foot squares, and then volunteers came to gather the collection that resulted in the data on figure 10.

vicinity. Small artifacts will inevitably be swept to the fence line, where they should form a linear pattern.

The concentrations of features and artifacts were found on a slight elevation, which was identified from the documents as the probable location of the Williams house. Chemical survey results were consistent with this finding; subsoil calcium, manganese, and magnesium peaked in this area.

The Gradall trench opened in May 1992 was 77.5 meters long, and five feet (1.65 meters) wide (Figure 8). Features were found clustered on the

highest part of the site, between 40 and 60 meters south of the driveway, The features included a linear stain, a root mold, a post hole, and a more complex feature of unknown purpose (Figure 7). Many stake holes were not capable of interpretation because of the small area uncovered.

Chemical survey was taken in both topsoil and subsoil levels. Subsequent research has indicated that a subsoil sample is sufficient.

Phosphate levels, normally representing a concentration of organic waste, were depressed in the area

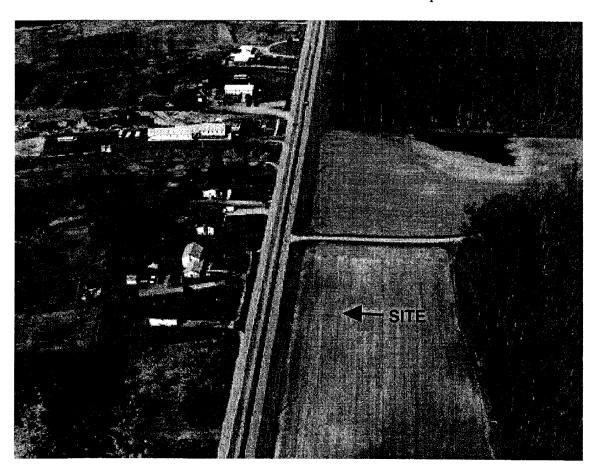


Plate 3

Before the highway project, looking northward. The driveway may be the old road shown in the Beers *Atlas* map. The tree line at right is the historic east boundary of the Williams tract.

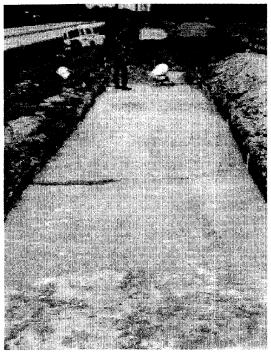


Plate 4

Staff members Jimi Ale and Kim Dugan clean the scraped area on the south end of the trench. A rusted-out domestic water pipe trench has been opened here, revealing a pipe just below the plowzone.

between 40 and 60 meters south, which we identified as the toft area. Calcium was elevated in the same area.

Success of the surface collection at the Phase II level inspired the data collection strategy implemented five years later in the data recovery phase. In the Phase III project, the entire Williams field, 900 feet long, would be subjected to a controlled surface survey (Figure 9).

The wedge-shaped tract was laid off in a ten-foot grid, with a zero point beyond its south end. Volunteers were invited from the local Native American organization and from the local



Plate 5

Kim and Jimi take a much-needed break while clearing the south end of the machine cut, where many small features were identified, associated with periods later than the time of Nathan Williams. This is a close-up of the small pipe trench.

archæological society. Each volunteer was assigned to a block of squares, and a marked bag was provided for each ten-foot unit.

The refined and expanded 1997 surface collection brought the Nathan Williams toft into sharp focus, at the same time giving further evidence that most of it had been destroyed by road construction.

About 300 to 350 feet south of the driveway, the largest concentration of artifacts was close to the road. Another concentration was observed about 200 to 250 feet south of the driveway, but a short distance from the road. Again, a

linear pattern of artifacts was observed parallel to the road, this time in several rows.

Two smaller artifact concentrations were observed, one at the south end of the project and the other at the 600-foot point. These happened to be relatively higher elevations along the way. The southern concentration proved to be the remains of a twentieth-century tenant house.

In order to understand the internal geography of the site, the surface collection was broken into its components. A diagram, showing the presence and absence of various artifact categories, figure 9, brought the Nathan Williams site into even sharper focus.

Presence/absence maps based on the surface surveys were most revealing (Figure 10).

Coal, a common indicator for later nineteenth-century house sites, was found throughout the study area. After the railroad came in 1856, heating by coal became economical, for the middle classes at least. A scattering of coal across a field is pretty fair evidence of manuring during this period, because coal waste would be mixed with household garbage. It may be taken as an indicator of progressive farming practices.

Coal ash was recommended to the author by Agricultural Extension Service agents as recently as 1970 for lightening clay soils. Therefore, coal was not considered a useful marker.

More units at the north end contained brick than at other parts of the site. Quantitative analysis of the brick was dismissed as impractical because no specific guidelines had been given to the volunteers as to how much brick should be recovered, and what minimum size constituted a recoverable specimen.

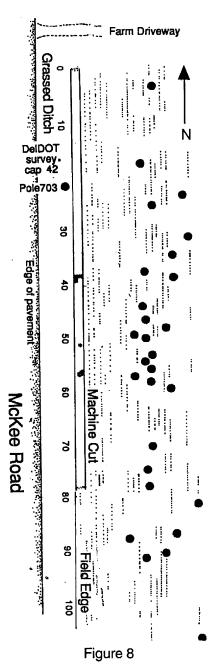


Diagram of the 1992 surface collection and the machine cut. The concentration of artifacts, at about 50 to 70 meters from the driveway, corresponds with the concentration that would be noted in 1997 at 850 to 1,000 feet along the new base line. The large dots are locations of flagged clusters. The stippled shading represents the direction of the plow furrows. Features in the machine-cut trench are shown for reference; the diagram of this trench is shown in Figure 7.

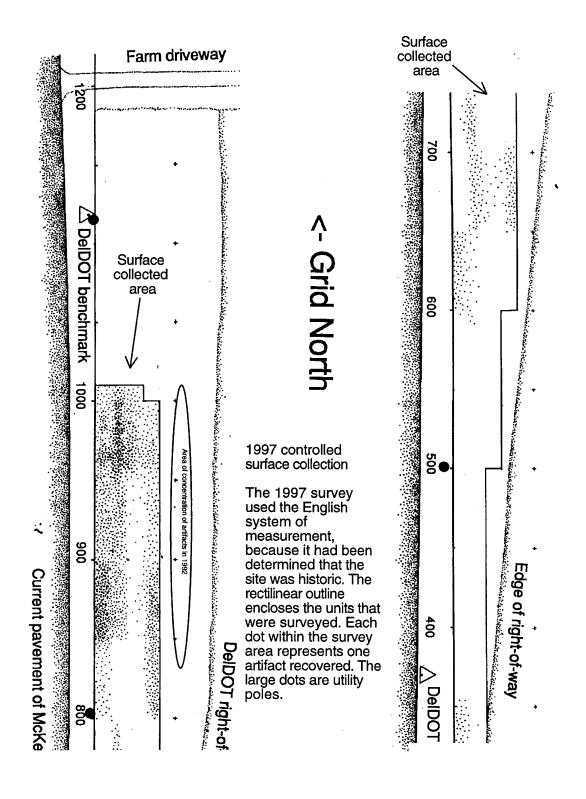
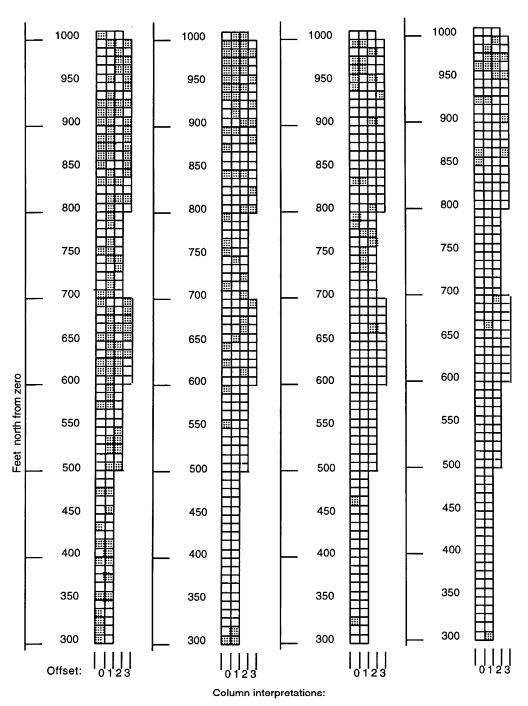


Figure 9

Figure 10

Controlled Surface Collection, July 26, 1997: Distributions of selected artifact types

Shading indicates presence of a particular material in a ten-foot surface collected unit.



1. Coal present in unit

2. Brick present in unit 3. Pearlware and red earthenware 4. Aqua and amethyst glass

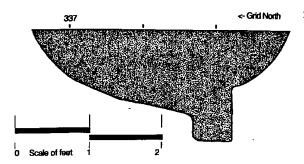


Figure 11

North-south profile through the feature at 337 feet on the grid

A definite cluster was indicated in the north, where the Williams house was expected. The bricks, upon analysis, proved to be useful artifacts.

Pearlware and red earthenware, which most commonly are found on early nineteenth-century sites, clustered on the north end of the tested area. Aqua and amethyst container glass, common on late nineteenth-century sites, were found primarily in this same area, suggesting long occupation after Williams left.

Surface collection results therefore confirmed our original presumption that the Nathan Williams site was located on the rise at the north end of the project area, and that the concentrations found farther south are related to other occupations.

The bricks were particularly Most, if not all, revealing. identifiable bricks were handmade and clamp fired. Overfired glazed bricks were not uncommon. In the north 990 square, there was a "voussoir" brick fragment, probably meant for a flat arch. Such arches are found on the Loockerman Hall, the nearby eighteenth-century mansion house that is now the symbolic main building of Delaware State University.

SUBSURFACE TESTING

After the surface collection was finished, the site was stripped and the most productive parts were stripped by Gradall. The machine removed the plowzone and the subsoil was shovel-scraped in search of features.

The Gradall trenches were a disappointment, in terms of finding features related to Nathan Williams. Much of the scraped area was devoid of features, and many of the features related to such later activities as an orchard. The Gradall stripping was directed by the maps of surface finds, particularly the 1997 work, figure 8. In the area where virtually every square had yielded brick, there was no sign of masonry structures

The feature at 1020 feet was an irregular hole, five feet by about three feet. It was interpreted as a root mold.

At 990 feet was a hole with one straight edge but the other sides irregular. It appeared to be a tree fall (figure 11). Contents of this feature included burnt coal, refined white earthenware, and a soft-drink bottle, all of which indicate deposition later than the Nathan Williams occupancy. Such items as dark-glazed red earthenware could have been that early.

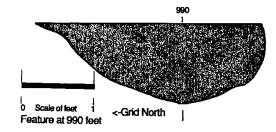


Figure 12

North-south profile through the feature at 990 feet on the grid

The contents of this pit are a secondary deposit, including some glass fragments with surface abrasion and a wide variety of pieces, never many of the same ware. Barbed wire and brown bottle glass indicate a relatively recent date for the final closure of this hole.

There were three postmolds or planting holes on ten-foot centers around 950 feet on the grid. Adjacent was another hole, apparently a planting hole. It contained burned clay, and there was a burned post mold about a foot away. This may be remains of a planting location, such as bean poles in an area where other crops requiring large holes would have been planted.

Some features, like the cluster around 840 feet on the grid, probably are related to planting activities, such as orchards. This cluster consisted of an irregular hole, 22 inches by 15 inches. About six feet away was a cluster of small stake or planting holes, while another foot-square amorphous stain was a little over four feet away.

These features are consistent with a propped-up orchard tree.

While manmade, these features do not appear to be related to the

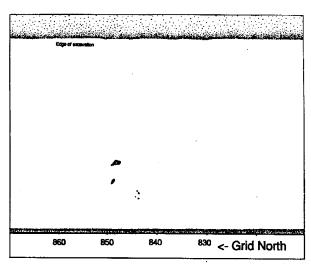


Figure 13
Other feature locations in the north, 800 to 900 feet on the grid

Nathan Williams period. Farther south along the line, we tested some of the cultural features to determine their origins.

Features were more numerous as we moved southward, but they also appeared to be newer.

At 650 feet on the grid, there was a cluster of three molds, five feet apart and about a foot in diameter. These molds were half a foot deep.

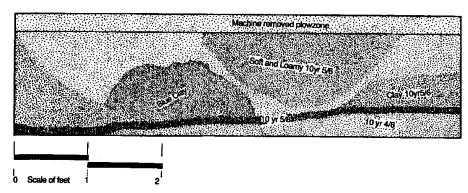


Figure 14
East-west section through the feature at 603.5 feet along the grid.

One of several linear features, probable deep plowscars, terminated about 630 feet. This v-bottom shape indicates the use of a deep plow with a chisel point, rather than a mouldboard plow that normally is employed for cultivation.

Most complex of the apparently agricultural features was located at about 600 feet on the grid (figures 14 and 15). This feature contained a soft loamy center section, surrounded by disturbances indicating a planting activity. The corners of the feature were marked by postmolds smaller than a foot in diameter, in a square pattern about two and a half feet on a side. Because it had so many components, this feature was selected for exploration by intensive excavation.

What emerged was a planting hole with corner posts, possibly a "box" to protect the tree from livestock. The other nearby apparent planting holes did not include this feature. The concentration of features in this area apparently was part of an orchard.

The last patch of features was found at the extreme south end of the

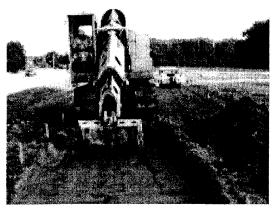


Plate 6

Gradalls were used in both projects to uncover features. This was the Phase III cut being opened.

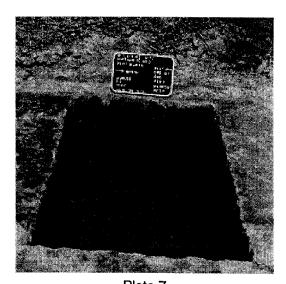


Plate /

Feature at 600 feet, opened to 20 inches

project area. Like the other stripped areas, this part of the site was selected for investigation on the basis of raw artifact counts. A shallow pipe trench, with the pipe still in place, crossed the trench (Figure 15).

A ditch, between 330 and 340 feet, appeared to be a domestic boundary, with a series of post molds and apparent planting holes. The ditch turned a corner and tapered away to the southward. A circle of stake molds and a row of small features combined to give the cumulative impression of a boundary line that had been maintained by a sequence of driven posts and plantings.

Without foundations, trash pits, wells, privies, or other traditional archæological interpretive features, the physical trail to Nathan Williams was obscure. Without any certain definition of this origins, or any of his subsequent history, his documentary history is weak. Yet we know that he lived, prospered, failed, and died.